

Q4SA Series and Q4SC Series

Single Packaged Heat Pump, Single Phase

Q4SA-10 SEER

2-1/2 - 5 Ton Units

Cooling: 30,000 to 58,000 Btuh

Heating: 29,000 to 59,000 Btuh

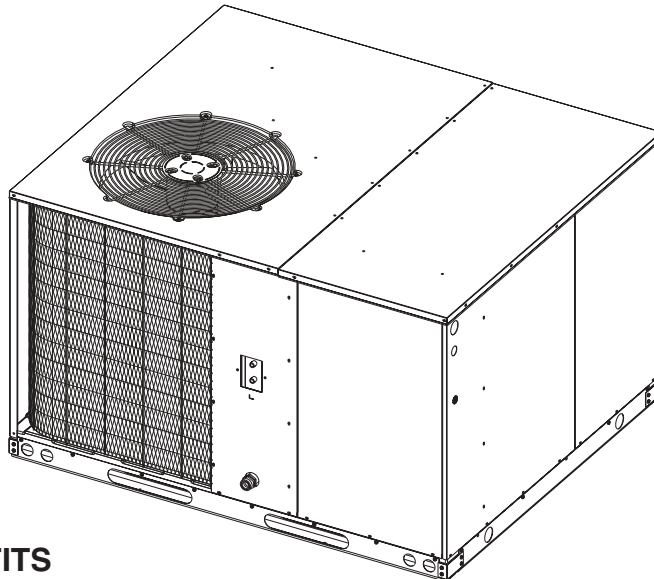
Q4SC-12 SEER

3, 4 and 5 Ton Units

Cooling: 36,000 to 59,000 Btuh

Heating: 34,000 to 56,000 Btuh

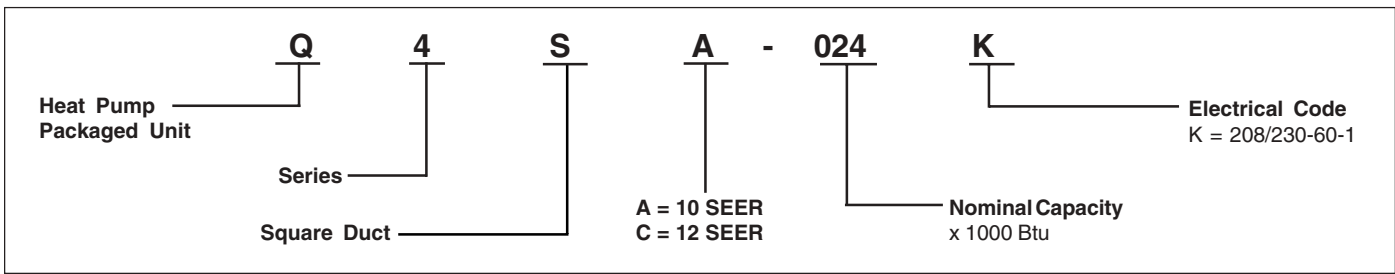
The Q4 Series single packaged heat pumps are high efficiency self contained cooling and heating units that can be installed on a roof or on a slab. The convertible unit design makes installations simple in all applications. Units are ETL and ETLc listed. The unit is truly designed with the contractor and the consumer in mind.



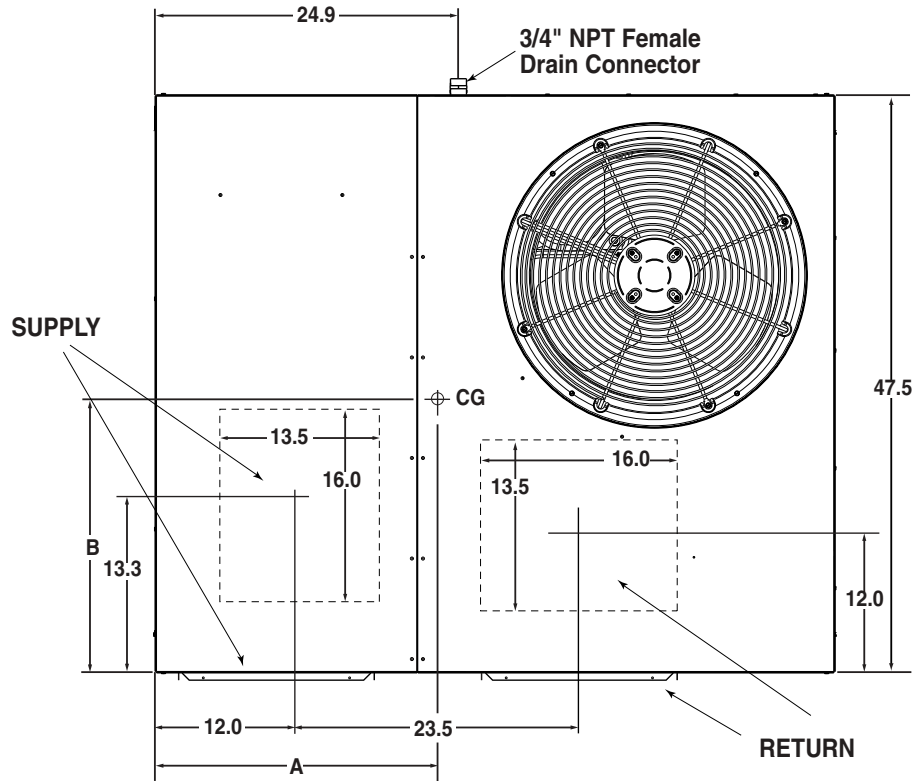
FEATURES AND BENEFITS

- **Compact Footprint/Low Profile**
Easy to handle and transport.
- **Heavy-Gauge, Full Perimeter Base Rails**
Facilitates forklift handling and curb mounting.
- **Convertible Air Delivery**
Horizontal or downflow to accommodate rooftop or horizontal application.
- **Galvanized Steel Cabinet**
Polyurethane finish provides 950 hours salt spray protection.
- **Plastic Coated Coil Guard and Mesh Hail Guard**
Will never rust and protects the coil from being damaged by balls, lawnmowers, hail etc.
- **Externally Accessible Service Ports**
Quick access to refrigerant system without disrupting operation.
- **Access to Controls and Major Components**
Easy in and out service.
- **Corrosion-Resistant Drain Pan**
Quickly drains away evaporator condensate.
- **Service Access Panels**
Allows easy access to all major components and the compressor. Designed to make servicing easier for the Contractor.
- **Easy to Install**
Electric heat strip provides up to 20 KW of heat output.
- **Proven, Industry Standard Components**
Easier service and availability.
- **Quiet Operation and Low Vibration**
20" fan blade combined with custom venturi condenser fan.
- **Accessories**
Roof curbs, economizers, fresh air dampers and more.
- **8 Year Residential Parts Warranty and 5 Year Quality Pledge**
The best warranty in the business. Extended labor protection plans are available.
- **One Year Commercial Parts Warranty**

MODEL IDENTIFICATION CODE



DIMENSIONS

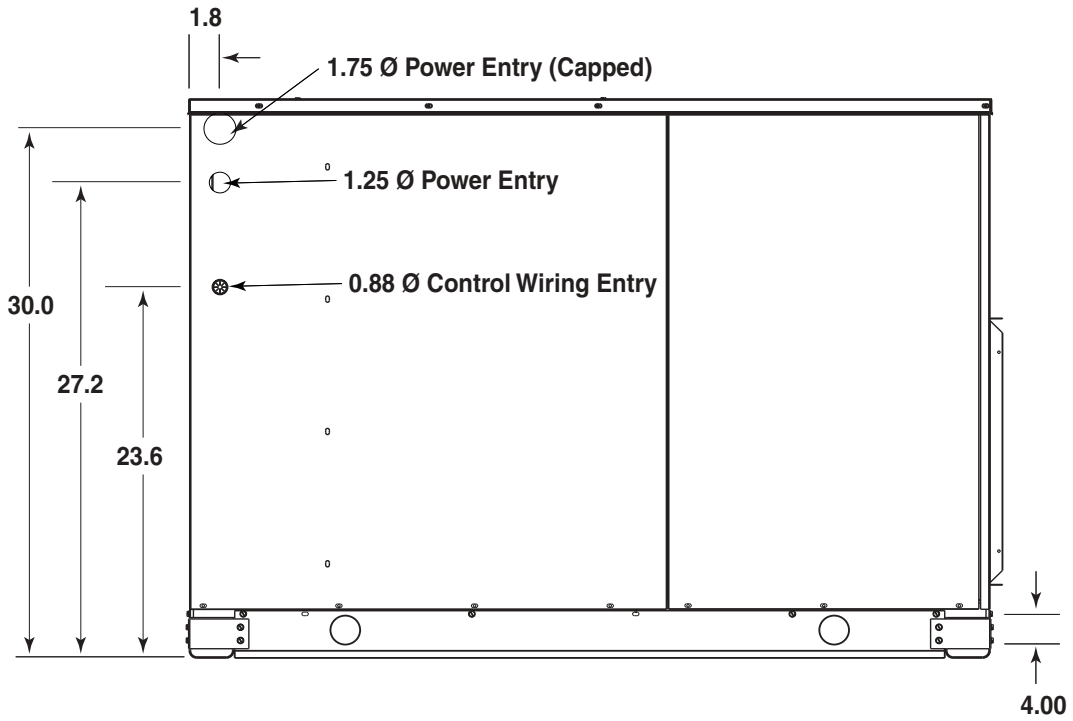


Top View

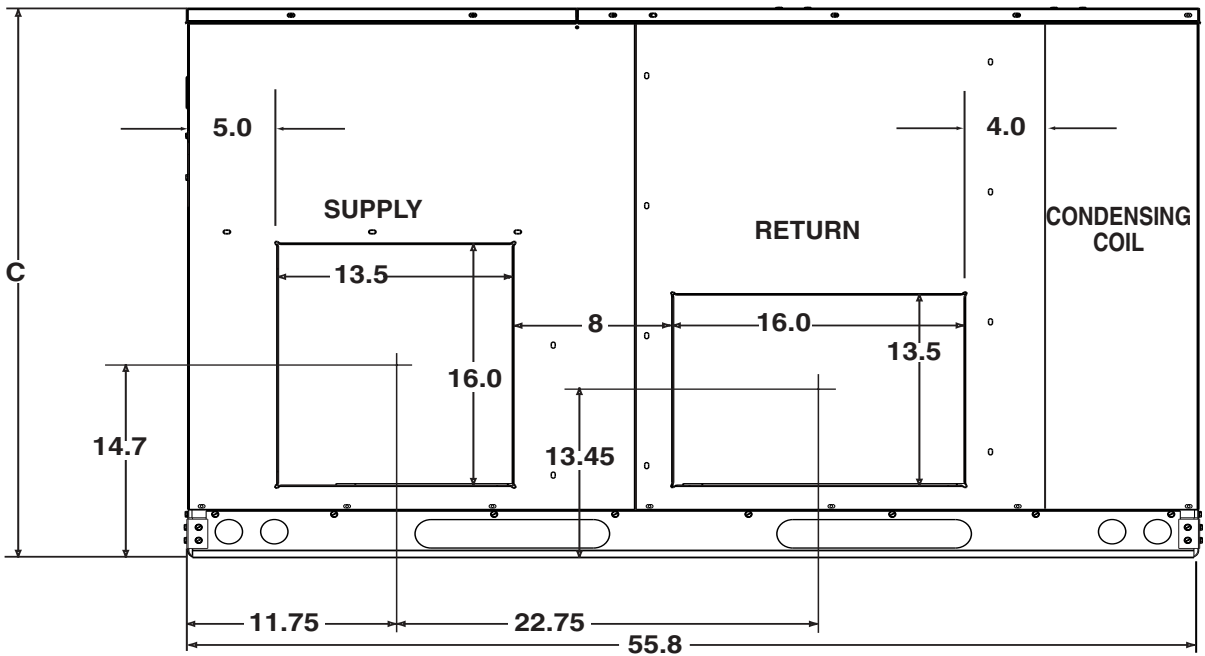
Model Number Q4SA-	Unit Weight	Center of Gravity		Height (in inches)	
		A	B	C	
				with base rails	without base rails
030	420	28.0	26.0	33.7	31.3
036	420	28.0	26.0	33.7	31.3
042	510	28.0	26.0	33.7	31.3
048	510	28.0	26.0	33.7	31.3
060	540	29.5	26.5	37.7	35.3

Model Number Q4SC-	Unit Weight	Center of Gravity		Height (in inches)	
		A	B	C	
				with base rails	without base rails
036	455	28.0	25.5	33.7	31.3
048	565	29.5	26.0	37.7	35.3
060	575	29.5	26.0	37.7	35.3

DIMENSIONS (Continued)



Side View



Back (Duct) View

SPECIFICATIONS

Model Number	Q4SA-					Q4SC-		
	030K	036K	042K	048K	060K	036K	048K	060K
Performance								
Capacity - Heating BTUH	29,000	33,000	42,000	45,000	59,000	34,000	46,000	56,000
Efficiency - HSPF	6.80	6.80	6.80	6.80	6.80	7.20	6.80	7.20
Capacity -Cooling BTUH	30,000	36,000	42,000	47,000	58,000	36,000	46,000	59,000
Efficiency - SEER	10.00	10.00	10.00	10.00	10.00	12.00	12.00	12.00
EER (Btuh/watt)	10.00	10.00	10.00	10.00	9.30	10.70	10.20	10.30
Electrical Rating - 60 Hz								
Phase	1	1	1	1	1	1	1	1
Operating Voltage Range	187 - 253	187 - 253	187 - 253	187 - 253	187 - 253	187 - 253	187 - 253	187 - 253
Compressor Data								
Volts	208 / 230	208 / 230	208 / 230	208 / 230	208 / 230	208 / 230	208 / 230	208 / 230
Rated Load Amps	15.3	14.8	24.3	21.8	27	17.9	21.4	32.1
Lock Rotor Amps	75	96	131	131	144	88	137	169
Indoor Blower								
Type / No. of Speeds	DD / 3	DD / 3	DD / 3	DD / 3	DD / 3	DD / 3	DD / 3	DD / 3
Motor - HP / RPM	1/4-1100	1/4-1100	1/2-1100	1/2 - 1100	1/2 - 1100	1/4-1100	1/2 - 1100	1/2 - 1100
Motor - Amps	1.3	1.3	3.1	3.1	3.1	1.3	3.1	3.1
Outdoor Fan								
Motor - HP / RPM	1/4 - 1100	1/4 - 1100	1/4 - 1100	1/4 - 1100	1/3 - 1100	1/4 - 1100	1/4 - 1100	1/3 - 1100
Motor - Amps	1.2	1.2	1.2	1.2	1.5	1.2	1.2	1.5
Fan Diameter / CFM	20 / 3800	20 / 3800	20 / 3800	20 / 3800	20 / 4000	20 / 3800	20 / 3800	20 / 4000
Refrigerant Charge - Oz.	85	61	104	142	176	102	221	260
Net Weight lbs.	420	420	510	510	540	455	565	575
Shipping Weight lbs.	430	430	520	520	550	465	575	585

ELECTRICAL DATA

Model Number	Heater Installed (Nom. KW)	Single Supply Circuit Option												Multiple Supply Circuit Option											
		Circuit A (Compressor & Fan)						Circuit B (Blower & Heater)						Circuit C (Heater Only)											
		Minimum Circuit Amp.	Rec Wire (60°C Cu)	Gauge	Rec Wire (75°C Cu)	Gauge	Maximum Over-current Rating*	Minimum Circuit Amp.	Rec Wire (60°C Cu)	Gauge	Rec Wire (75°C Cu)	Gauge	Maximum Over-current Rating	Minimum Circuit Amp.	Rec Wire (60°C Cu)	Gauge	Rec Wire (75°C Cu)	Gauge	Maximum Over-current Rating						
		A						B						C											
Model		Single circuit												Multiple Circuit											
Heater kw		MCA	60°F	75°F	90°F	MOP	MCA	60°F	75°F	90°F	MOP	MCA	60°F	75°F	90°F	MOP	MCA	60°F	75°F	90°F	MOP				
Q4SA-030K	0	21.6	10	10	10	35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
	5	46.6	6	8	8	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
	8	61.2	4	6	6	70	20.3	10	10	10	35	40.9	6	8	8	45	-	-	-	-	-				
	10	71.6	3	4	6	80	20.3	10	10	10	35	51.3	6	8	8	60	-	-	-	-	-				
	15	96.6	1	3	3	100	45.3	6	8	8	50	51.3	6	8	8	60	-	-	-	-	-				
Q4SA-036K	0	21.0	10	10	10	35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
	5	46.0	6	8	8	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
	8	60.6	4	6	6	70	19.7	12	12	12	30	40.9	6	8	8	45	-	-	-	-	-				
	10	71.0	3	4	6	80	19.7	12	12	12	30	51.3	6	8	8	60	-	-	-	-	-				
	15	96.0	1	3	3	100	44.7	6	8	8	50	51.3	6	8	8	60	-	-	-	-	-				
Q4SA-042K	0	34.7	8	8	8	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
	5	59.7	4	6	6	70	31.6	8	8	8	50	28.1	10	10	10	30	-	-	-	-	-				
	8	74.3	3	4	6	90	31.6	8	8	8	50	42.7	6	8	8	45	-	-	-	-	-				
	10	84.7	3	4	4	90	31.6	8	8	8	50	53.1	6	6	6	60	-	-	-	-	-				
	15	109.7	1	2	3	110	31.6	8	8	8	50	53.1	6	6	6	60	25.0	10	10	10	30				
	20	134.7	0	0	1	150	31.6	8	8	8	50	53.1	6	6	6	60	50.0	6	8	8	60				
Q4SA-048K	0	31.6	8	8	8	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
	5	56.6	4	6	6	70	28.5	10	10	10	50	28.1	10	10	10	30	-	-	-	-	-				
	8	71.1	3	4	6	90	28.5	10	10	10	50	42.7	6	8	8	45	-	-	-	-	-				
	10	81.6	3	4	4	90	28.5	10	10	10	50	53.1	6	6	6	60	-	-	-	-	-				
	15	106.6	1	2	3	110	28.5	10	10	10	50	53.1	6	6	6	60	25.0	10	10	10	30				
	20	131.6	0	0	1	150	28.5	10	10	10	50	53.1	6	6	6	60	50.0	6	8	8	60				
Q4SA-060K	0	38.4	8	8	8	60	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
	5	63.4	4	6	6	80	35.3	8	8	8	60	28.1	10	10	10	30	-	-	-	-	-				
	8	77.9	3	4	4	90	35.3	8	8	8	60	42.7	6	8	8	45	-	-	-	-	-				
	10	88.4	2	3	4	100	35.3	8	8	8	60	53.1	6	6	6	60	-	-	-	-	-				
	15	113.4	0	2	2	125	35.3	8	8	8	60	53.1	6	6	6	60	25	10	10	10	30				
	20	138.4	0	0	1	150	35.3	8	8	8	60	53.1	6	6	6	60	50	6	8	8	60				
Q4SC-066K	0	22.5	10	10	10	35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
	5	47.5	6	8	8	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
	8	62.1	4	6	6	70	21.2	10	10	10	35	40.9	6	8	8	45	-	-	-	-	-				
	10	72.5	3	4	6	80	21.2	10	10	10	35	51.3	6	6	6	60	-	-	-	-	-				
	15	97.5	1	3	3	100	46.2	6	8	8	50	51.3	6	6	6	60	-	-	-	-	-				
Q4SC-048K	0	31.1	8	8	8	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
	5	56.1	4	6	6	70	28	10	10	10	45	28.1	10	10	10	30	-	-	-	-	-				
	8	70.6	3	4	6	90	28	10	10	10	45	42.7	6	8	8	45	-	-	-	-	-				
	10	81.1	3	4	4	90	28	10	10	10	45	53.1	6	6	6	60	-	-	-	-	-				
	15	106.1	1	2	3	110	28	10	10	10	45	53.1	6	6	6	60	25	10	10	10	30				
	20	131.1	0	0	1	150	28	10	10	10	45	53.1	6	6	6	60	50	6	8	8	60				
GOASC-060K	0	40.6	6	8	8	60	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
	5	65.6	4	6	6	80	37.5	8	8	8	60	28.1	10	10	10	30	-	-	-	-	-				
	8	80.2	3	4	4	100	37.5	8	8	8	60	42.7	6	8	8	45	-	-	-	-	-				
	10	90.6	2	3	4	100	37.5	8	8	8	60	53.1	6	6	6	60	-	-	-	-	-				
	15	115.6	0	1	2	125	37.5	8	8	8	60	53.1	6	6	6	60	25	10	10	10	30				
	20	140.6	0	0	1	150	37.5	8	8	8	60	53.1	6	6	6	60	50	6	8	8	60				

*When overcurrent rating exceeds 60, internal circuit breakers must be installed in addition to branch circuit protection at distribution panel.

BLOWER PERFORMANCE

Model Number Q4SA-	Speed	External Static Pressure Drop - inches water column							
		0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8
030	High	1600	1510	1410	1310	1200	1070	930	760
	Medium	1410	1330	1250	1150	1050	940	820	670
	Low	1130	1070	1000	930	850	760	650	530
036	High	1600	1510	1410	1310	1200	1070	930	760
	Medium	1410	1330	1250	1150	1050	940	820	670
	Low	1130	1070	1000	930	850	760	650	530
042	High	2200	2140	2070	2000	1930	1850	1770	1690
	Medium	1940	1890	1830	1760	1700	1630	1560	1490
	Low	1560	1510	1460	1410	1360	1310	1250	1200
048	High	2200	2140	2070	2000	1930	1850	1770	1690
	Medium	1940	1890	1830	1760	1700	1630	1560	1490
	Low	1560	1510	1460	1410	1360	1310	1250	1200
060	High	2200	2140	2070	2000	1930	1850	1770	1690
	Medium	1940	1890	1830	1760	1700	1630	1560	1490
	Low	1560	1510	1460	1410	1360	1310	1250	1200

Model Number Q4SC-	Speed	External Static Pressure Drop - inches water column							
		0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8
036	High	1600	1510	1410	1310	1200	1070	930	760
	Medium	1410	1330	1250	1150	1050	940	820	670
	Low	1130	1070	1000	930	850	760	650	530
048	High	2270	2200	2140	2070	2000	1930	1850	1770
	Medium	2000	1940	1890	1830	1760	1700	1630	1560
	Low	1600	1560	1510	1460	1410	1360	1310	1250
060	High	2270	2200	2140	2070	2000	1930	1850	1770
	Medium	2000	1940	1890	1830	1760	1700	1630	1560
	Low	1600	1560	1510	1460	1410	1360	1310	1250

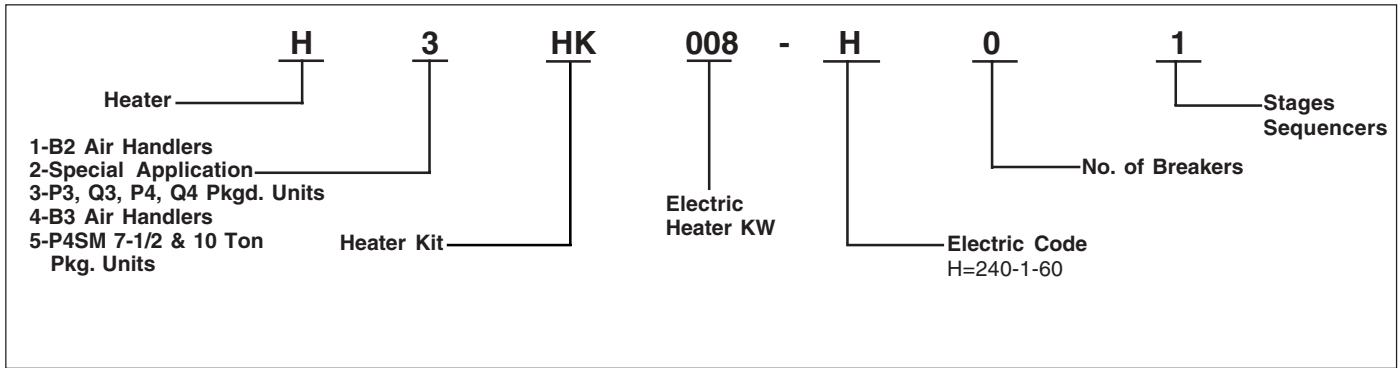
Note: Airflow performance is for wet coil.

HEATER APPLICATION MATRIX

Model Number	H3HK-005H-01	H3HK-008H-01	H3HK-010H-01	H3HK-015H-01	H3HK-020H-01	H3HK-015H-21	H3HK-020H-21
	917166	917167	917168	917169	917170	917172	917173
Q4S()-030K	X	X	X(2)	X(2)	NA	X	NA
Q4S()-036K	X	X	X(2)	X(2)	NA	X	NA
Q4S()-042K	X(2)	X(2)	X(2)	X(3)	X(3)	X(1)	X(1)
Q4S()-048K	X(2)	X(2)	X(2)	X(3)	X(3)	X(1)	X(1)
Q4S()-060K	X(2)	X(2)	X(2)	X(3)	X(3)	X(1)	X(1)

NA = Not Applicable.
 () = Number of internal circuit breaker kits required.

MODEL IDENTIFICATION CODE



Q4 ACCESSORIES

Description	Part Number
Roof Curb (8")	547830
Roof Curb (14")	547831
Roof Curb (18")	547850
Roof Curb (24")	547851
Supply/return transition, 16"	547834
Supply/return transition, 18"	547835
Concentric diffuser, flush, 16"	547836
Concentric diffuser, flush, 18"	547837
Concentric diffuser, step down 16"	547838
Concentric diffuser, step down 18"	547839
Circuit Breaker, disconnect 3 phase	913740
Manual Fresh Air Damper	547832
Motorized Fresh Air Damper	547840
Economizer, downflow w/filter (does not require filter kit) modulating	547833
Economizer, horizontal modulating	547841
Economizer, horizontal 3-position w/filter	547896
Economizer, downflow 3-position w/filter	547897
Power Exhaust for use with downflow economizer (special order)	547842
Power Exhaust for use with horizontal economizer (special order)	547843
HOOD TYPE HAIL GUARD 30" X 60" P4SA036, R4GA024, 030, 036, 042, R4GC024	547844
HOOD TYPE HAIL GUARD 30" X 76" P4SA048, P4SC036, Q4SA036	547845
HOOD TYPE HAIL GUARD 34" X 76" P4SA060, P4SC048, 060, Q4SA048, 060, Q4SC036, R4GA048, 060, R4GC030, 036, 042	547846
HOOD TYPE HAIL GUARD 38" X 76" Q4SC048, 060, R4GC048, 060	547847
CO2 sensors (special order)	547848
DUCT SMOKE DETECTOR PHOTO ELEC	547892
MULTI SIGNAL CONTROL	547893
SAMPLING TUBE ST3	547894
SAMPLING TUBE ST5	547895
Filter Rack, All Downflow Applications (not required with economizer)	547885
Filter Kit (not required with economizer) for Horizontal Applications R4GA 024 - 042	547886
Filter Kit (not required with economizer) for Horizontal Applications PPA1SC 036	547887
Filter Kit (not required with economizer) for Horizontal Applications PPA1SC 048 - 060	547888
Filter Kit (not required with economizer) R4GC 048 - 060, Q4SC 048 - 060	547889
Universal Hard Start Kit	912933
Low Pressure Switch Kit	913551
High Pressure Switch Kit	913550
Low Ambient Kit	913549A
P-Trap Kit	913810
U.S. LP Gas Conversion Kit (0 ft to 10,000 ft above sea level)	904090A
Canadian LP Gas Conversion Kit (0 to 4,500 ft above sea level)	904091A
Outdoor Thermostat Kit	913852